

## IN THE CLAIMS

Please AMEND the claims as follows:

1-85. (Canceled)

86. (Previously Presented) An oil comprising a compound selected from the group consisting of brassicastanol, at least one brassicastanol ester, stigmastanol, or at least one stigmastanol ester, and a mixture thereof.

87-88. (Canceled)

89. (Currently Amended) ~~An A~~ A first oil produced ~~by a plant that produces a in a~~ in a transgenic seed having an elevated level of a compound selected from the group consisting of sitosterol, at least one sitosterol ester, sitostanol, at least one sitostanol ester, and mixtures thereof, as well as a reduced level of a compound selected from the group consisting of campesterol, a campesterol ester, campestanol, a campestanol ester, and mixtures thereof, compared to a second oil produced in a corresponding ~~transgenic or non-transgenic plant seed~~ transgenic or non-transgenic plant seed ~~that does not contain introduced DNA encoding a peptide, polypeptide, or protein that affects phytosterol or phytostanol biosynthesis and accumulation in said corresponding plant.~~

90. (Currently Amended) The oil of claim 86, wherein said oil is produced in by a ~~plant that produces a~~ transgenic seed having a reduced level of a compound selected from the group consisting of campesterol, a campesterol ester, campestanol, a campestanol ester, and mixtures thereof, compared to a second oil produced in a corresponding ~~transgenic or non-transgenic plant seed. that does not contain introduced DNA encoding a peptide, polypeptide, or protein that affects phytosterol or phytostanol biosynthesis and accumulation in said~~ transgenic or non-transgenic plant seed. ~~corresponding plant.~~

91. (Currently Amended) The first oil of claim 89, wherein said first oil ~~is produced by a plant that produces a seed having~~ comprises an elevated level of sitosterol and sitostanol, as

well as a reduced level of campesterol, ~~compared to a corresponding transgenic or non-transgenic plant that does not contain introduced DNA encoding a peptide, polypeptide, or protein that affects phytosterol or phytostanol biosynthesis and accumulation in said corresponding plant.~~

92. (Currently Amended) The first oil of claim 91, wherein said oil ~~comprises up to~~ elevated level of sitostanol is up to a 10-fold increase in sitostanol, as well as up to and said reduced level of campesterol is up to a 2.6-fold 5.6-fold decrease in campesterol, ~~compared to a corresponding transgenic or non-transgenic plant that does not contain introduced DNA encoding a peptide, polypeptide, or protein that affects phytosterol or phytostanol biosynthesis and accumulation in said corresponding plant.~~

93. (Previously Presented) The oil according to claim 86, further comprising a compound selected from the group consisting of at least one sterol, at least one phytosterol, at least one phytosterol ester, at least one phytostanol, at least one phytostanol ester, and a mixture thereof.

94. (Previously Presented) The oil according to claim 93, further comprising a compound selected from the group consisting of a sitostanol, at least one sitostanol ester, and a mixture thereof, wherein said sitostanol, at least one sitostanol ester, or a mixture thereof comprises at least about 57% by weight of the total sterol compounds of said oil.

95-96. (Canceled)

97. (Previously Presented) The oil according to claim 86, further comprising a campesterol ester, campestanol, at least one campestanol ester, and a mixture thereof, wherein said campesterol ester, campestanol, at least one campestanol ester, and a mixture thereof, comprises about 5% to about 9% by weight of the total sterol compounds of the oil.

98. (New) The oil according to claim 86, wherein said oil is produced in a transgenic seed.

99. (New) The first oil according to claim 89, wherein the genome of said transgenic seed comprises an introduced deoxyribonucleic acid molecule (DNA) encoding a steroid 5 $\alpha$ -reductase enzyme, wherein said introduced DNA is operatively linked to regulatory signals that cause seed-specific or plastid-specific expression of said introduced DNA.

100. (New) The first oil according to claim 99, wherein the amino acid sequence of said steroid 5 $\alpha$ -reductase enzyme is from a source selected from the group consisting of *Arabidopsis*, corn, and soybean.

101. (New) The first oil according to claim 99, wherein said introduced DNA comprises a polynucleotide sequence selected from the group consisting of SEQ ID NO: 2, SEQ ID NO: 4, SEQ ID NO: 6, and SEQ ID NO: 8.

102. (New) The first oil according to claim 99, wherein the amino acid sequence of said steroid 5 $\alpha$ -reductase enzyme is selected from the group consisting of SEQ ID NO: 3, SEQ ID NO: 5, SEQ ID NO: 7, and SEQ ID NO: 9.

103. (New) The first oil according to claim 89, wherein said first oil is produced by a transgenic seed from a plant selected from the group consisting of *Brassica*, soybean, castor bean, cotton, safflower, sunflower, flax, corn, coconut, palm, olive, sesame, peanut, *Arabidopsis*, tobacco, wheat, barley, oats, amaranth, potato, rice, tomato, peas, beans, lentils, and alfalfa.

104. (New) A first oil produced in a transgenic seed having an elevated level of a compound selected from the group consisting of sitosterol, at least one sitosterol ester, sitostanol, at least one sitostanol ester, and mixtures thereof, as well as a reduced level of a compound selected from the group consisting of campesterol, a campesterol ester, campestanol, a campestanol ester, and mixtures thereof, compared to a second oil produced by a corresponding

non-transgenic seed, wherein the genome of said transgenic seed comprises an introduced DNA encoding a steroid 5 $\alpha$ -reductase enzyme and said introduced DNA is operatively linked to regulatory signals that cause seed-specific or plastid-specific expression of said introduced DNA.

105. (New) An oil produced in a transgenic seed comprising a compound selected from the group consisting of brassicastanol, at least one brassicastanol ester, stigmastanol, at least one stigmastanol ester, and a mixture thereof.

106. (New) The oil according to claim 105, further comprising a compound selected from the group consisting of at least one sterol, at least one phytosterol, at least one phytosterol ester, at least one phytostanol, at least one phytostanol ester, and a mixture thereof.

107. (New) The oil according to claim 106, further comprising a compound selected from the group consisting of a sitostanol, at least one sitostanol ester, and a mixture thereof, wherein said sitostanol, at least one sitostanol ester, or a mixture thereof comprises at least about 57% by weight of the total sterol compounds of said oil.

108. (New) The oil according to claim 105, further comprising a compound selected from the group consisting of a sitostanol, at least one sitostanol ester, and a mixture thereof, wherein said sitostanol, at least one sitostanol ester, or a mixture thereof comprises at least about 0.08% of the dry weight of said transgenic seed.

109. (New) The oil according to claim 105, further comprising a tocopherol compound in an amount of at least about 0.02% of the dry weight of said transgenic seed.

110. (New) The oil according to claim 105, further comprising a campesterol ester, campestanol, at least one campestanol ester, and a mixture thereof, wherein said campesterol ester, campestanol, at least one campestanol ester, and a mixture thereof, comprises about 5% to about 9% by weight of the total sterol compounds of the oil.